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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,775	09/18/2001	Michael Orlando Cimini	13DV13971	7795
29399	7590	06/06/2006	EXAMINER	
JOHN S. BEULICK (12729) C/O ARMSTRONG TEASDALE LLP ONE METROPOLITAN SQUARE SUITE 2600 ST. LOUIS, MO 63102-2740			VAN DOREN, BETH	
			ART UNIT	PAPER NUMBER
			3623	
DATE MAILED: 06/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/954,775

Applicant(s)

CIMINI ET AL.

Examiner

Beth Van Doren

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/17/2006 has been entered.

The following is a non-final office action in response to communications received 05/12/06. Claims 1, 9, and 15 have been amended. Claims 1-20 are pending.

### ***Response to Amendment***

2. Applicant's amendments to claims 1, 9, and 15 are sufficient to overcome the claim objections set forth in the previous office action.

3. Applicant's amendment to claims 9 and 15 are also sufficient to overcome the 35 USC § 112, second paragraph, rejections of claims 9-20.

### ***Response to Arguments***

4. Applicant's arguments with regards to the rejections based on Powers et al. (U.S. 6,604,084) have been fully considered, but they are not persuasive. In the remarks, Applicant argues that Powers et al. does not teach or suggest displaying at least one suggest for improving performance of a desired manufacturing function.

In response to this argument, Examiner points out that this limitation has been added in the current amendment entered by the communications of 05/12/2006. In the new art rejections asserted below, as necessitated by amendment, Examiner has relied on Suzuki et al. (U.S.

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6,625,511) to teach both manufacturing functions being evaluated as well as displaying at least one suggest for improving performance of a desired manufacturing function. See figure 11, column 7, lines 60-67, column 12, lines 30-40 and 60-67, column 19, lines 15-35, column 20, lines 55-63, where Suzuki et al. discloses such limitations.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Powers et al. (U.S. 6,604,084) in view of Suzuki et al. (U.S. 6,625,511).

As per claim 1, Powers et al. discloses a system for evaluating process performance, said system comprising:

a device (See figure 1 and column 2, line 58-column 3, line 13, wherein a client device is disclosed); and

a server connected to said device and configured to receive process production capability information data using a computer, from a user via said device (See figure 1, column 2, lines 58-67, and column 3, lines 14-24), said server further configured to:

compile the received information (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, column 9, lines 14-32, which compile received information);

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display to the user information related to the production process (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein information is displayed to a user);

compare the received information in the form of answers to respective questions to reference information in the form of answers to questions developed to encompass an expected range of answers from the users responding to the questions (See column 4, lines 25-40, column 5, lines 10-28, column 9, lines 7-18 and 28-47, column 11, line 49-column 12, line 10 and lines 44-51, which discloses processing the received information against reference information. The received information is in the form of answers to questions stored in the system. These answers are compared against all possible answers to the questions); and

display the results of the compared information to the user via said device wherein the results include a numerical score representing a relative capability of the process being evaluated to perform a desired function (See column 2, lines 1-12 and 50-60, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results information is displayed to a user. These results concern the evaluation of productivity and quality of a process); and

display information useful in determining the overall performance and identifying ways to improve performance (See column 4, lines 25-35).

However, Powers et al. does not expressly disclose that the desired function is a manufacturing function or displaying at least one suggestion for improving performance.

Suzuki et al. discloses manufacturing functions and displaying at least one suggestion for improving performance (See figure 11, column 7, lines 60-67, column 12, lines 30-40 and 60-67,

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column 19, lines 15-35, column 20, lines 55-63, which discloses evaluating a manufacturing process and/or function and displaying point by point suggestions for improvement).

Powers et al. discloses a performance evaluation system that uses questions and production associated with performance areas to generate quality and performance reports concerning an individual, group, process, or other suitable type of item or operation.

Manufacturing functions are a type of process or operation. Suzuki et al. discloses evaluating manufacturing processes and/or functions and displaying suggestions for improvement via a computer display. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the performance evaluation system of Powers et al. in the manufacturing field in order to more efficiently generate evaluation data and reports in the manufacturing industry through application of an automated system. Powers et al. discusses the ability of the system to allow an enterprise to set up the performance evaluation system to fit the organizational structure of that specific enterprise, thus making the tool customizable to any enterprise and enterprise situation. See column 2, lines 58-64, column 5, lines 10-20 and line 65-column 6, line 5.

Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to display suggestions to the user based on the performance evaluation performed by Powers et al. in order to more efficiently improve the quality of the manufactured items by reducing the likelihood of errors associated with manufacturing. See Suzuki et al., column 3, lines 20-25, 37-45, and 60-67.

As per claim 2, Powers et al. discloses wherein said server is further configured to receive information pertaining to process performance evaluation categories selected by the user

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(See column 9, lines 47-64, column 11, lines 32-60, wherein the evaluation categories are set up by a user).

As per claim 3, Powers et al. discloses wherein said server is further configured to receive information regarding at least one of a planning, shop practices, and operator skill (See column 9, lines 5-30, which discloses receiving information regarding operator skill).

As per claim 4, Powers et al. discloses wherein said server is further configured to receive information regarding at least one of a complexity, conditions, control, error proofing, measurement, and process (See column 2, lines 50-60, column 3, lines 45-60, which discloses productivity analysis of the process).

As per claim 5, Powers et al. discloses wherein said server further configured to receive information including a numerical score that expresses a relative capability of a process performance (See column 1, line 57-column 2, line 12 and lines 51-57, column 3, lines 45-60, column 4, lines 26-36, column 9, lines 48-55, and column 13, lines 20-35, wherein information is received that expresses a relative capability of a process performance). However, Powers does not expressly disclose that this process performance is performing a desired manufacturing function.

Powers et al. discloses a performance evaluation system that utilizes productivity and quality data. Powers et al. specifically discloses that the performance evaluation system is used to evaluate an individual, a group, a process, or other suitable types of operation. See column 2, lines 50-60, and column 5, lines 45-52. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to receive information regarding the process of a manufacturing function in order to more efficiently perform a performance evaluation this

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process by efficiently communicating with users of a network environment that have input regarding the process. See column 1, lines 35-47, and column 2, lines 1-12, which discuss the benefits of such an automated system.

As per claim 6, Powers et al. discloses wherein said server is further configured to:  
assign received information a weighted value (See column 9, lines 10-30, and column 11, line 62-column 12, line 25, wherein a weighted value is assigned received information);  
sum received information weights (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, wherein received information is summed);  
evaluate weighted summed data (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, wherein the data is evaluated); and  
display results in a ranked order based on weighted data (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results are displayed, the results based on the weights).

As per claim 7, Powers et al. teaches wherein said device is configured to be a server for a network of customer devices (See figure 1 and column 2, line 58-column 3, line 22, column 5, lines 25-45, wherein the device serves to other devices).

As per claim 8, Powers et al. discloses wherein said server and said device are connected via a network (See figure 1, column 3, lines 1-20, column 5, lines 39-45, wherein the server and device are connected via a network).

As per claim 9, Powers et al. teaches a method for evaluating performance capabilities of a production process by operating a system including a server and at least one device connected to the server, said method comprising:



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determining evaluation area categories based on an evaluation of the production performance capabilities of at least one of the process and the part being evaluated (See figure 5A-B, column 1, line 58-column 2, line 5 and lines 50-60, column 8, line 60-column 9, line 17 and lines 45-60, wherein evaluation areas are established to evaluate performance capabilities of the process); and

receiving, using a computer, information relevant to the capabilities of the production process within the evaluation categories (See column 2, lines 1-12 and 50-60, column 5, lines 25-30, column 9, wherein information is received).

Powers et al. further teaches the remaining elements, which are equivalent to limitations in claim 1. Therefore, these elements are rejected using the same art and rationale set forth above in the rejection of claim 1.

As per claim 10, Powers et al. discloses assigning a weight factor to information received within each evaluation category (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, which disclose weight factors).

Claim 11 recites substantially similar elements to claim 5 and is therefore rejected using the same art and rational as set forth above.

As per claim 12, Powers et al. discloses wherein displaying the results further comprises numerically ranking the production process evaluation areas based on the results (See column 2, lines 1-12, column 3, lines 39-55, column 4, lines 20-40, and column 5, lines 25-28, wherein results are displayed in a numerically ordered ranking).

As per claim 13, Powers et al. teaches wherein displaying the results further comprises displaying the results in a format that facilitates comparisons between a plurality of production

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process evaluation areas (See column 3, line 43-column 4, line 15 and lines 25-35, column 5, lines 25-30, wherein the results are shown by date, time, user, hierarchical level, etc.).

As per claim 14, Powers et al. teaches wherein determining evaluation area categories further comprises selecting at least one evaluation area category that represents at least one of production complexity, conditions, control, error proofing, measurement, operator skill, planning, process, and shop practices (See figures 5A-B, column 2, lines 50-60, column 3, lines 45-60, column 9, lines 5-30, which disclose at least operator skill and productivity analysis).

As per claim 15, Powers et al. teaches a method for evaluating performance of a production process using a network connecting a plurality of users, the network including a server and a plurality of user display devices, said method comprising:

receiving from the users using a computer, information concerning evaluation categories relevant to the production process (See column 2, lines 1-12 and 50-60, column 5, lines 10-27, column 9, lines 20-45, which disclose soliciting information from users);

assigning each evaluation category at least one weighted factor that normalizes the received information with respect to the received information's relative contribution to a process capability improvement (See column 9, lines 10-30, column 10, lines 1-12, and column 11, line 62-column 12, line 25, which disclose weight factors that regulate each questions worth in the overall score);

Powers et al. further teaches the remaining elements, which are equivalent to limitations in claim 1. Therefore, these elements are rejected using the same art and rationale set forth above in the rejection of claim 1.

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Claims 16, 17, 19, and 20 recite substantially similar elements as claims 13, 14, 5, and 12, respectively, and are therefore rejected using the same art and rationale as set forth above.

As per claim 18, Powers et al. discloses wherein soliciting from the users information concerning evaluation categories further comprises soliciting information from the users via at least one of a survey, radio push-buttons, and pull-down menu (See column 9, lines 20-45, which disclose at least radio buttons and drop-down lists).

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arimoto et al. (U.S. 5,586,022) discloses evaluation of manufacturing elements and outputting evaluation results and improvement proposals.

Shaw (U.S. 6,101,479) discloses evaluating and ranking the performance of a process in order to improve the quality of the process.

Abelow (U.S. 5,999,908) discloses an improvement process for a manufacturer.

Miyakawa et al. (U.S. 5,717,598) discloses performing manufacturing process evaluation.

Russell et al. (U.S. 2003/0060993) discloses evaluating manufacturing performance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*bvd*

bvd

May 31, 2006

*Beth Van Doren*

Beth Van Doren  
Patent Examiner  
Art Unit 3623